

FORM P-1009 (modified)
To: U.S. Department of Commerce
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**INFORMATION DISCLOSURE STATEMENT
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Date: January 22, 2001

Page

1

of

1

Atty.
Dkt. No.

M#

Client Ref.

0256628

Applicant: FIRE et al.

Appln. No.: 09/215,257

Filing Date: December 18, 1998

Examiner: D. NIKODEM

Group Art Unit: 1633-1635

U.S. PATENT DOCUMENTS

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR					
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FOREIGN PATENT DOCUMENTS

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					Enclosed	No	Enclose	No
KAL	OR	WO 00/63364	10/2000	WIPO	PACHUK et al.			
	PR							
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OTHER (including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

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	ZR							
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	BBR							
	CCR							
	DDR							

Examiner

Karen A. Lacourciere

Date Considered:

02-09-01

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Date: December 1, 2000

Page

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of

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Examiner: D. Nikodem

Group Art Unit: 1633/635

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Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
KAL	6,010,908	01/2000	GRUENERT et al.			
KAL	6,136,601	10/2000	MEYER, JR. et al.			

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KAL	WO 99/53050	10/1999	WIPO	WATERHOUSE et al.				
KAL	WO 99/32619	07/1999	WIPO	FIRE et al.				

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KAL	BASS, "Double-stranded RNA as a template for gene silencing," <i>Cell</i> (2000) vol. 101, pages 235-238			
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KAL	CAPLEN et al., "dsRNA-mediated gen silencing in cultured <i>Drosophila</i> cells: a tissue culture model for the analysis of RNA interference," <i>Gene</i> (2000), vol. 252, pages 95-105			
KAL	CHUANG et al., "Specific and heritable genetic interference by double-stranded RNA in <i>Arabidopsis thaliana</i> ," <i>PNAS</i> (2000) vol. 97, pages 4985-4990			
KAL	COLUSSI et al., "Debcl, a proapoptotic Bcl-2 homologue, is a component of the <i>Drosophila melanogaster</i> cell death machinery," <i>J Cell Biology</i> (2000) vol. 148, pages 703-714			

Examiner: Karen A. Lacourciere

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Page 2 of 6

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KAL	FAGARD et al., "AGO1, ODE-2, and RDE-1 are related proteins required for post-transcriptional gene silencing in plants, quelling in fungi, and RNA interference in animals," PNAS (2000) vol. 97, pages 11650-11654			
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KAL	FRASER et al., "Functional genomic analysis of <i>C. elegans</i> chromosome I by systematic RNA interference," Nature (2000) vol. 408, pages 325-330			
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KAL	HUANG et al., "The proneural gene <i>amos</i> promotes multiple dendritic neuron formation in the <i>Drosophila</i> peripheral nervous system," Neuron (2000) vol. 25, pages 57-67			
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Examiner *Karen A. Lacourciere*

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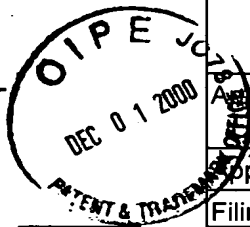
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Page

3

of

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Examiner: B. Nikodem

Group Art Unit: 1633 / 635

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Examiner

Karen A. Lacourciere

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Group Art Unit: 1635-1635

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Page

4

of

6

U.S. PATENT DOCUMENTS

K Lacourciere

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Page

5

of

6

Examiner: D. Nikodem

Group Art Unit: 4633 / 635

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KAL	-	SHI et al., "Genetic interference in <i>Trypanosoma brucei</i> by heritable and inducible double-stranded RNA," RNA (2000) vol. 6, pages 1069-1076	✓			
KAL	-	SHIPPY et al., "Analysis of <i>maxillopedia</i> expression pattern and larval cuticular phenotype in wild-type and mutant <i>Tribolium</i> ," Genetics (2000) vol. 155, pages 721-731	✓			
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KAL	-	UI-TEI et al., "Sensitive assay of RNA interference in <i>Drosophila</i> and Chinese hamster cultured cells using firefly luciferase gene as target," FEBS Letters (2000) vol. 479, pages 79-82	✓			
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Examiner *John A. LaCourriere*

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Page

6

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KAL	WILLERT et al., "A <i>Drosophila</i> Axin homolog, <i>Daxin</i> , inhibits Wnt signaling," Development (1999) vol. 126, pages 4165-4173	✓			
KAL	WU-SCHARF et al., "Transgene and transposon silencing in <i>Chlamydomonas reinhardtii</i> by a DEAH-box RNA helicase," Science (2000) vol. 290, pages 1159-1162	✓			
KAL	YANG et al., "Evidence that processed small dsRNAs may mediate sequence-specific mRNA degradation during RNAi in <i>Drosophila</i> embryos," Current Biology (2000) vol. 10, pages 1191-1200	✓			
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Examiner *Karen A. Lacourciere*

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Page

1

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DPH	YR	Fire, A., et al., (1998) Potent and specific genetic interference by double-stranded RNA in <i>Caenorhabditis elegans</i> . Nature 391: 806-811				
↓	ZR	Fire, A., (1998) "RNAi info from the Fire Lab" (Web Document with protocols to accompany the Fire et al., Nature paper). Posted on our public-access web site from February 1, 1998				
↓	AAR	Fire, A., and Fleenor, J. (1998) On the generality of RNA-mediated interference. Worm Breeder's Gazette 15(3): 8 (June 1, 1998).				
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Page

2

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	ZR	Harfe, B., et al. (1998) Analysis of a Caenorhabditis elegans twist homolog identifies conserved and divergent aspects of mesodermal patterning. Genes and Development 12: 2623-2635				
	AAR	Tabara, H., et al. (1998) RNAi in C. elegans: Soaking in the genome sequence. Science 282: 430-431				✓
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Examiner: *David O. Brown*

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1 -	ZR	Montgomery, M.K., et al., (1998) RNA as a target of double-stranded RNA-mediated genetic interference in Caenorhabditis elegans. Proc. Natl. Acad. Sci. 95:15502-15507. ✓				
↓	AAR	Fire, A., et al., (1991) Production of antisense RNA leads to effective and specific inhibition of gene expression in C. elegans muscle. Development 113: 503-514.				
↓	BBR	Grieson, D. et al., (1991) Does co-suppression of sense genes in transgenic plants involve antisense RNA? Trends in Biotechnology 9:122-123				

Examiner: *Forrest LaCombe*

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Page

4

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	ZR	Guo, S. and Kempthues, K. (1995) par-1, a gene required for establishing polarity in C. elegans embryos, encodes a putative Ser/Thr kinase that is asymmetrically distributed. Cell 81: 611-620				
	AAR	Matzke, M.A., and Matzke, A.J.M. (1995) How and why do plants inactivate homologous (trans)genes? Plant Physiology 107: 679-685				
	BBR	Metzlaff, M., et al., (1997) RNA-mediated RNA degradation and chalcone synthetase A silencing in petunia. Cell 88: 845-854				

Examiner: *Karen A. Jaconson*

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Page

5

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8

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U.S. PATENT DOCUMENTS

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
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OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

DN	YR	Ratcliff, F., et al., (1997) A similarity between viral defense and gene silencing in plants. Science 276: 1588-1560			
	ZR	Jorgensen, R.A., et al., (1998) An RNA-based information superhighway in plants. Science 279: 1486-1487	✓		
	AAR	Waterhouse, P.M., et al., (1998) Virus resistance and gene silencing in plants can be induced by simultaneous expression of sense and antisense RNA. Proc. Natl. Acad. Sci. 95: 13959-13964.	✓		
	BBR	Ngô, H., et al., (1998) Double-stranded RNA induces mRNA degradation in Trypanosoma brucei. Proc. Natl. Acad. Sci. 95: 14687-14692	✓		

Examiner: *Karen A. LaCombe*

Date Considered: 07-31-02

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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256628

**INFORMATION DISCLOSURE STATEMENT
BY APPLICANT**

Applicant: FIRE et al.

Appln. No.: 09/215,257

Filing Date: December 18, 1998

Date: March 18, 1999

Page

6

of

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DPN	YR	Kennerdell, J., and Carthew, R. (1998) Drosophila frizzled and frizzled2 act in the wingless pathway as determined by dsRNA-medication genetic interference. Cell 95: 1017-1026	✓			
	ZR	Jorgensen, R.A., et al., (1999) Do unintended antisense transcripts contribute to sense co-suppression in plants? Trends in Genetics 15: 11-12	✓			
	AAR	Misquitta, L., and Paterson, B.M. (1999) Targeted disruption of gene function in Drosophila by RNA interference (RNA-i): A role for nautilus in embryonic somatic muscle formation. Proc. Natl. Acad. Sci. 96: 1451-1456	✓			
	BBR					

Examiner: *Karen A. Lamon*

Date Considered: 07-31-02

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Page

7

of

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DPN	YR	Sharp, P.A. (1999) RNAi and double-stranded RNA. Gene and Development 13: 139-141	✓				
	ZR	Seydoux, G., et al. (1996) Repression of gene expression in the embryonic germ lineage of C. elegans. Nature 382: 713-716	✓				
	AAR	Stam, M., et al. (1997) The silence of genes in transgenic plants. Annals of Botany 79: 3-12	✓				
	BBR						

Examiner: *Karen A. Johnson*

Date Considered: 07-31-02

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Page 8 of 8

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DN	YR	Nellen, W., and Lichtenstein, C. (1993) What makes an mRNA anti-sense-itive? Trends in Biochemical Sciences 18: 419-423				
	ZR	Proud, C.G. (1995) PKR: A new name and new roles. Trends in Biochemical Sciences 20: 241-246				
	AAR	Jacobs, B.L., and Langland, J.O. (1996) When two strands are better than one: The mediators and modulators of the cellular responses to double-stranded RNA. Virology 219: 339-349				
	BBR					

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